

COMMERCIAL
LIGHTING
by
VIRDEN



CATALOG NO. 37-S

Sell lighting -

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DIRECT
INDIRECT

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THE need for improved standards of artificial lighting in commercial and semi-commercial fields is so widespread as to be almost universal. With awakening realization of need the question "What shall we do about our lighting?" arises with constantly increasing frequency.

Successful fixture salesmen must answer this question first since to talk about the appearance, quality and price of the product is no longer enough. LIGHTING is the subject which always commands immediate attention and is the problem you have to solve before you can sell your customer the source units he needs.

The opening pages of this book are therefore devoted to light, lighting markets and their requirements, together with some of the most essential facts you should know and use frequently. The book is yours and we want you to make use of it to your own best advantage, thereby increasing your volume of fixture business and your earnings.

Adequate lighting coupled with the attractive design of Virden Lustralite has helped this inviting little lunch room to become one of the most popular eating places in the neighborhood.



Virden Tranquillite units give a subdued lighting effect which greatly enhances the atmosphere of this ice cream parlor. The uniform intensity level of over 10 foot-candles aids the display of merchandise, renders menus easily read and makes it a cheerful and pleasant place throughout.

LIGHT for SEEING « « «

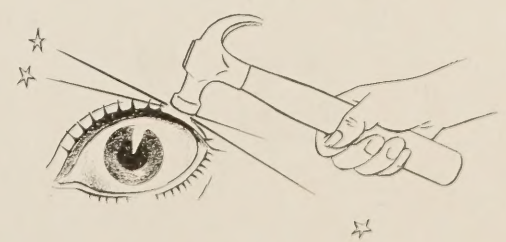
Old Sol is our leading light source. Out of doors on clear days he provides as much as 10,000 foot candles of illumination. On cloudy days or in the shade, his generosity scales down to 2000, 1000, 500 or even 200. It is a high quality of light, too, pouring in from all directions to be absorbed by the greens and browns of Nature which do not reflect glare. Meanwhile Sol remains so far removed that his own blinding brightness seldom intrudes.



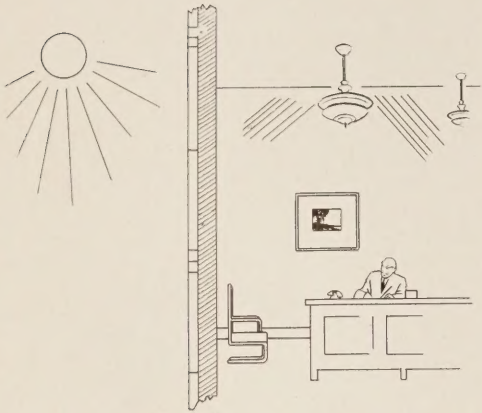
These are the conditions under which human eyes have developed, this the kind of light to which Nature has adapted them. For hundreds of thousands of years seeing tasks were performed by sunlight, simple tasks which did not strain the eyes and were never prolonged. Modern life has changed all that. Now we have moved inside, added night to our days and multiplied the number and complexity of our seeing tasks many times.



Although this change coincided with the introduction of the incandescent lamp, was perhaps caused by it, as a bare light source the first bulb left much to be desired. Yet we have been slow to realize the punishment to which we have been subjecting our eyes, working them harder and longer under 5 foot candles or less of glaring and unsatisfactory light and it has taken us an amazingly long time to learn that the real purpose of artificial light as well as sunlight is to aid seeing.



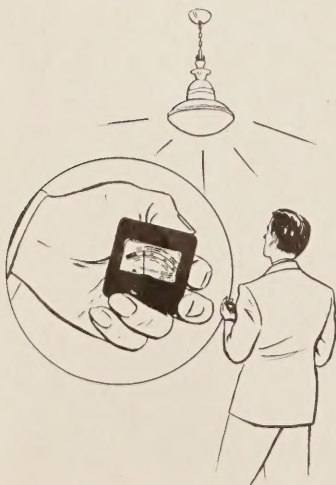
LIGHT for SEEING « « «



Happily the Science of Seeing by clearly demonstrating the relationship of LIGHT to SIGHT is changing our attitude toward the whole subject. It is convincing more and more people that they need to replace with modern equipment obsolete and outmoded means of lighting which harm rather than help. This new Science also plays an important part in the development of lighting sources which can actually compete with the Sun.



The most rapid and enthusiastic acceptance of the LIGHTING for SEEING principle has been in the home. From there it is spreading to store, office, school and factory. Resistance crumbles before the undebatable fact that BETTER LIGHT means BETTER SIGHT and a little serious contemplation of just how much BETTER SIGHT contributes to human happiness and efficiency.



We receive about 87% of our impressions through our eyes. Poor light reduces the accuracy and number of impressions. No light leaves us an impoverished 13%. Is it any wonder that the men who tell the lighting story get a kick out of it? They are doing a worthwhile job and getting results. After all, the seasoned campaigner needs only to set forth his facts clearly, put the matter to a vote and let the "eyes have it."

LIGHT for SELLING « « «

A good merchant wouldn't think of selecting his own stock from a dark warehouse or an unlighted ship's hold without first having the goods brought out to the light for inspection. Yet the lighting systems still used in thousands of stores give one the impression that customers are expected to make their purchases on faith. Here, then, is a market for improved lighting with nearly unlimited possibilities.

If, as the psychologists claim, 87% of human impressions are received through the eyes, then the majority of those impressions which inspire the desire to own something are visual and the best way to stimulate the buying inclination is

to light up the store so that the merchandise can really be seen by the patrons.

Merchants realize this, at least to some extent, and are anxious to know what they can and should do to improve their own lighting. They welcome sound advice which they recognize as sane and honest and they are ready customers for improved lighting fixtures. This by no means applies only to the big department stores. The little fellow is even more keenly interested because he's used to the struggle to stay in business and is on the lookout for whatever may help him hang on and prosper.

The importance of the small store market is definitely established since this class of outlet comprises about 50% of the 2,000,000 or more mercantile establishments in the country.



Here is a well lighted shoe store with merchandise clearly visible to the customers. The lighting is achieved at low cost by the use of attractively designed Emperor units (direct lighting) closely centered.

A complete installation of Lustralite semi-indirect units has made this one of the outstanding beauty shops in the neighborhood. Good lighting in a shop like this always tends to give the patrons confidence in the shop's services.





Floral displays illuminated by Lustralite tempt the pocketbooks of even the most casual shoppers who pause for a look at the attractive interior of this flower store.

IMPORTANCE of GENERAL ILLUMINATION

Whether a merchant offers for sale a commodity, a service or both, first impressions are most important. That is why any well lighted interior is like a magnet in its capacity to draw people toward it. In the case of the store or shop, it helps to attract the casual shopper and sometimes even the mere stroller in from the street.

Once inside, however, the first reaction in looking about is "how nice!" Then, probably without being at all aware of the real reason, the shopper's attitude toward buying becomes favorable and when the attention is drawn to some specially lighted display of a desired article, immediate purchase frequently follows.

For this reason, in considering the lighting problem of any store or shop, the GENERAL ILLUMINATION merits first attention. In fact, the subject is of such importance to the lighting salesman and his customers that considerable space is devoted to its discussion further along in this book.

ECONOMY of GOOD LIGHTING

Three of the five major reasons why goods are returned for credit, "faulty merchandise," "not satisfactory," "did not match," can usually be blamed directly to the fact that the buyer did not see the merchandise clearly at the time of purchase.

If one of two stores in the same neighborhood, stocking the same class of merchandise, is poorly lighted while the other is equipped with up-to-the-minute illumination, the former will soon have to surrender hard won trade to the well lighted competitor. The insidious part of this is that customers seldom tell why they are changing. They just change, and go where they can see what they are buying.

These facts and the tendency of even casual shoppers to seek the better lighted centers have been proved repeatedly in the BETTER LIGHT-BETTER SIGHT movement. They are authoritative and the salesman who presents them properly to his prospect is assured an immediate hearing. Once you have convinced a merchant that better lighting results in fewer losses and actually brings him more business, it should not be hard to persuade him to make the necessary investment in equipment.

Typewriters and business machines are difficult to display because of their capacity for absorbing light. Good results are obtained in this store by a battery of 500W Tranquilites combined with a high reflection factor in the ceiling and upper side walls.



LIGHT for OFFICE WORK

Examination of lighting methods and conditions in thousands of offices all over the country has proved conclusively that office workers as a class need rescue. The wide variety of arrangement and the many different kinds of work involved make it difficult to generalize on the subject but there can be no doubt whatever that this field offers an enormous market for improved units.

Employers are interested. Once they are convinced that poor lighting is in a large measure responsible for errors, limited production, irritability, loss of time, all the hundred and one things which result in costly waste and outright losses, it is not hard to get them to do something about it.

In the case of professional offices such as those of doctors, dentists and attorneys, the situation is not unlike that of the store. The professional man depends on clients for his living and the impression his office makes upon

them is of first importance. Good lighting, suitable for his needs, is as valuable there as in the display of merchandise.

Many building managers recognize adequate office lighting as a merchandising factor in the rental of space. Others have been forced to come to it by the demands of their tenants who do not hesitate to seek better conditions as business improves. Whatever the original reason, office building owners now constitute an important and profitable market for modernized lighting equipment.

Wholly indirect lighting was impossible in this office because of columns, pipe lines and other interruptions. Installation of closely centered Lustralite units solved the lighting problem very satisfactorily.



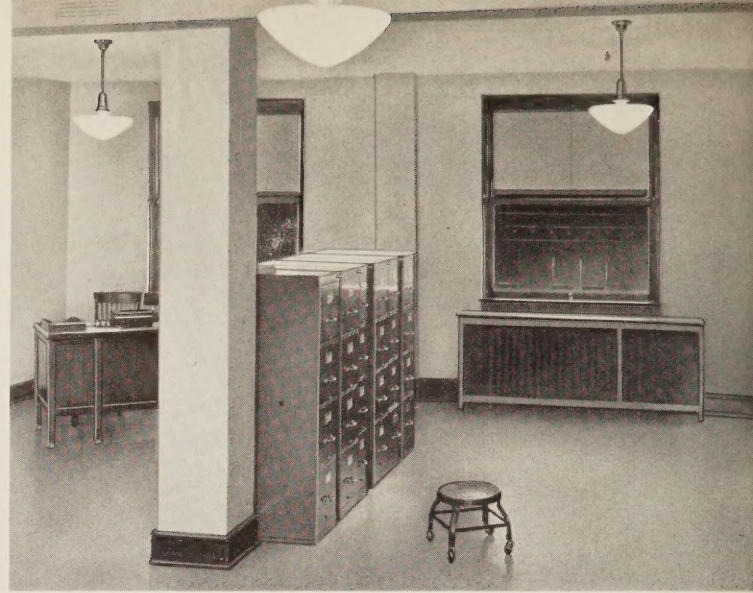
MODERN STANDARDS of OFFICE LIGHTING »

The value of windows as a source of general illumination for most offices is practically nil. Especially is this true of the larger plants where there are many workers. Windows are usually along one side of the room or, at the most, two and organization economy will not permit everyone an equidistant location from the light source.

As a result the desk farthest away may be getting no light at all even on the brightest days. The occupant, however, will be subjected to the constant glare from which he has no protection. A desk lamp may counteract it some but only slightly. Furthermore, in a modern office, short or cloudy and rainy days, since the workers' time can not be accommodated to outside conditions, cut down the dependability of window lighting.

A good quality of uniform high intensity lighting from artificial sources is much more satisfactory. Glare is eliminated. All desks share the light equally. The need for local lighting sources is reduced and when they are used their results are far better since the workers' eyes are no longer subjected to the destructive combination of contrasting intensities and glare.

The high ceilings and light colored walls in this office make for satisfactory results from direct lighting units. 20 foot-candles has been obtained at desk level from these Emperor enclosing globes and 300W lamps.



Here is another well lighted office, averaging 20 foot-candles of non-glaring illumination. It is typical of the satisfaction to be derived from the installation of Virden semi-indirect unit Visualite units.

ECONOMY FACTORS

Office workers are paid for their capacity for sustained seeing over long periods. No one can see well even for a short time under insufficient and faulty lighting.

4,000 individual tests in the offices of seven large firms showed that lighting of a definitely improved standard increased the speed of short hand transcription 20.1 per cent and the speed of typing from printed copy 11.2 per cent.

A two year test in a group of large offices where key punching machines are used was made under the influence of systematically advanced standards of illumination. The results, an increase of 56.3 per cent in production and a decrease in errors of 72.5 per cent.

From these and other tests, Babson estimates that doubling the levels of artificial lighting in offices would earn, through speedier work and fewer mistakes, ten times the added cost of electricity.

These are pretty conclusive facts. Here is another. The average age of office lighting systems is EIGHTEEN YEARS. Of course no successful office manager would think of using other office equipment as outmoded as that.

Pointing out to him that lighting equipment is even more important is the salesman's job. It is also his opportunity to open extensive channels to new business for himself and his house.

LIGHT for the CLASS-ROOM

A study of school children conducted in thirty-four large cities and eighteen states showed that 22% had defective vision. A similar study of normal school and college students brought out the alarming fact that 40% suffered from impaired eye-sight. Not over 5% of pre-school youngsters have defective vision yet 25% show marked defects before finishing high school. It is pretty clear that the fault lies somewhere within that twelve year period. Lighting is indisputably a contributing factor.

A very large majority of the school rooms in use today depend on daylight supplemented usually by obsolete and inadequate lighting equipment. In a typical class-room those sitting by the windows may receive on bright days as much as 75 foot candles. On dull or dark days this scales down to 18. Not so bad by the window but the row farthest away is only getting from 3.8 down to .9. Even as close as the second row the amount of light is less than half what the first row is enjoying.

If those whom the salesman is trying to interest in better school room lighting believe this is not typical and that their conditions are better, it is very easy to take sight meter readings in their presence and show them conclusively that they owe it to the children in the community to install improved lighting and modern equipment.

Not only is unequal distribution and low intensities which cause continual eye strain the rule but the typical quality of the light is bad. Throughout the room pupils' eyes are bom-

barded by glaring rays from the sunlit windows, from bare light sources and from improperly designed and placed enclosing globes. Enough light for everyone in the room is imperative but it is just as important that it be the right kind of light.

College conditions are no better. Perhaps, because of the long hours required, they really are worse. Students take notes in lecture rooms which average less than five foot candles. In their residence rooms where they devote the most hours to study, they meet their own needs for more light with cheap and inadequate fixtures or bare bulbs, confusing brightness with lighting for seeing. As for group study quarters, a survey of libraries in six colleges showed the average intensity to be less than 4 foot candles with no point in the room free from glare.

The United States Naval Academy is of course accepted as a standard of perfection in its line. Yet, the need for improved lighting

throughout was forcibly brought home to the authorities when they realized that 12.7% of the 1934 graduating class was ineligible for commissions because of defective eyesight. It is common knowledge that good eyes are a requirement for entrance.

Class rooms, auditoriums, dormitories, libraries, special school rooms such as shops, sewing rooms, kitchens, drawing rooms, are all calling for improved lighting conditions. This is a tremendous market whose resistance to improvement is fast diminishing.



These youngsters are not handicapped by poor vision. Throughout the room a uniform intensity level of 30 foot-candles is maintained from automatically controlled indirect units which provide plenty of light of the right quality for young eyes.

PROPER LIGHTING AN AID TO IMPROVED SCHOLARSHIP « « « «

Many tests have been conducted over the country the past few years to determine the relationship of lighting to the progress of pupils in school. During the tests every care has been exercised to leave all conditions other than lighting exactly as before. Findings have been carefully scrutinized and only conservative statements issued. The results are interesting but there is only room here for one or two typical cases.

At Tuscumbia, Ala., a sixth grade of seventy was divided into two sections as equal as a series of intelligence and achievement tests could make them. Each was assigned a teacher of equal ability and during the test they exchanged places. Except for lighting the rooms were identical. Aside from sunlight, one had two glaring fixtures which yielded 6 foot candles directly underneath and less than 2 at

any distance. The other room was equipped with modern indirect fixtures which provided uniformly throughout the room 14 foot candles of diffused non-glaring light. A photo-electric relay control turned on this system when natural light fell below the required standard. The test lasted three years and showed conclusively that in the better lighted class room there were 68% less failures than in the other.

In Park School at Hood River, Oregon, semi-indirect units were installed in ten class rooms. These units delivered an average throughout the rooms of 10 foot candles of improved quality light as compared to a previous 2 of poor light. Careful check was made of grade records for several years before and after the change. Before the change 13% failed annually on the average. In four years since the annual failure average is 6%, over fifty per cent less.

MODERN STANDARDS of CLASS-ROOM ILLUMINATION « «

Unlike the office which can make use of locational light sources, the ordinary school room must depend on a general system for illumination, one which is much more extensive than a few fixtures hung at wide intervals and turned on when the teacher decides it's "getting dark outside."

There must be enough units to assure an equal spread of light over the room so that no one spot is enjoying a feast while another is suffering famine. They must be designed to supply the proper quality of light. Their combined output should be well in excess of minimum intensity standards.

10 foot candles should be regarded as absolute minimum. If the standard might be held to 14 or 15, that would be fine. From the standpoint

of ideal lighting there is probably no upper limit to intensity, provided the quality is right. But there is a very decided limit to public finances and the important thing to accomplish first is definite and recognized improvement. 10 foot candles will do that.

There should be no point of direct or reflected glare anywhere in the room. The light should be diffused and of a soft appearance. Indirect or semi-indirect fixtures are best adapted to the requirements of the class room under the conditions most frequently encountered. Automatic control by photo-electric relay is a practical and economical advantage, since the lights are on when needed and do not continue to consume current because someone forgot to turn them off.



A close-up view of the Virden Emperor, direct lighting unit. Here is an efficient enclosing bowl whose attractive appearance is further enhanced by the "stream lined" chain hanger.

DIRECT LIGHTING

Where requirements and conditions are suitable to the installation of direct lighting, there is a slight advantage in cost. This is due, among other factors, to a reception of more lumens direct from the source so that it is possible to build up higher intensity levels while burning less wattage.

However, it is important not to overestimate the value of this comparison and to fully appreciate all the determining factors because the quality of light is as important as quantity. Aside from the anticipated purpose of illumination, the number of units needed, proper height and spacing and the quality and design of enclosing globes must be considered. To build intensity and source glare at the same time accomplishes nothing of benefit to the customer.

Although it is difficult to formulate a rule which says definitely when and where to use direct lighting, stores of all sorts are good customers for this type of illumination. In this field alone lies an enormous market for new fixtures and improved enclosing globes. Most important is the need for additional units with which to obtain the necessary intensity levels of Lighting for Selling.

INDIRECT LIGHTING

Indirect source units should be used where it is important to obtain a soft, restful quality of diffused light. If the system is wholly indirect all light is reflected from the ceiling and side walls. With semi-indirect units some light comes through direct from the source although the greater part is reflected.

This type of illumination is especially suited to offices, class rooms, drafting rooms and other places where the workers' eyes must at all times be protected from glare. It is also ideal for certain types of stores and shops which aim at a pleasing surrounding atmosphere.

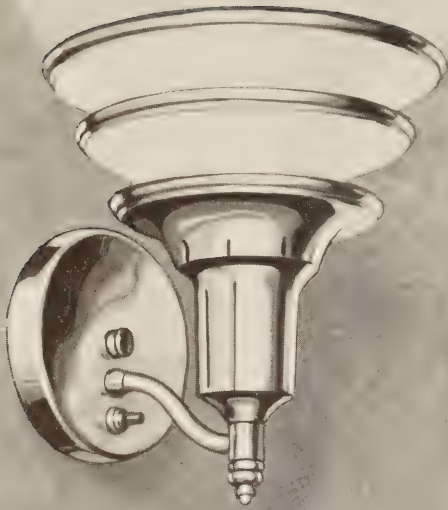
The nature, finish and color of reflecting surfaces is important and has direct bearing on the cost of operating the system. Obviously, the higher the reflecting factor, the more satisfactory will be the illumination, provided the reflecting surfaces do not have unpleasant glare spots.

Because the source of light is concealed higher wattage lamps can be used in indirect units. Thus it is possible to build up the intensity levels to any desired standard without damaging the quality of the output. Because of this indirect units should be recommended for general lighting as often as possible.

A close-up of the Virden Tranquillite Indirect Unit, an attractively designed light source which never intrudes upon the eye regardless of the angle of vision and which is highly efficient as to the amount and quality of output.



DECORATIVE LIGHTING



A Virden Tranquilite Wall Unit, decorative in design and efficient in output. The use of this type of unit supplements ceiling installations and contributes its full share to the general lighting system.

There is always considerable demand for purely decorative units in shops and stores which perhaps contribute little to illumination but a great deal to appearance. The lighting salesman will not begin at this point but he will find it a prolific source of additional business since it is often just the needed trim for a general installation. Incidentally decorative fixtures can be brought into the lighting story as additional sources which contribute to the whole effect and help make it more attractive. First determine the purpose of illumination. Is it for the display of merchandise, to create an atmosphere or to assist in the accomplishment of seeing tasks? If the latter, what is the nature of the task? How difficult and how prolonged is it? It may be necessary for the salesman to show the prospect his need since he will not always be aware of it.

FACTORS WHICH GOVERN THE TYPE OF LIGHTING TO RECOMMEND « « « « «

The economic factor comes in for consideration at this point. The shrewd salesman can form his own estimate of the amount of outlay which can reasonably be expected but he should be prepared to convince the prospect of the value of a larger investment than the latter probably has in mind. After all, selling light is a practical business and a sale which brings about some improvement while falling short of ideal results, is none-the-less a sale.

The next step is to determine the proper illumination level and convince the prospect of his need for increased intensity. He probably realizes this to some extent but nothing is more effective than the judicious use of a sight meter to prove your case.

Once the salesman has established his case for more light, it will be necessary to take up the kind of light. Here is the point where choice between direct and indirect units comes in. The physical characteristics of the room or rooms must be carefully considered, shape and size, obstructions if any, ceiling height, finish and color of walls and ceiling.

It is evident, then, that the proper type of Lighting Equipment to recommend depends largely upon these five considerations: the purpose of illumination, required intensity level, kind of illumination, surrounding conditions, and the economic factor. There are no hard and fast rules to guide the salesman here. He must use his own judgment although reference to the charts on pages 16 and 17 will be of assistance.

SELL FIXTURES THE PROFITABLE WAY « « « « « «



Getting attention and holding it is easy with a sight meter. The salesman who uses one regularly and intelligently will find himself away out in front of the fellow who relies on catalogs and a good "line."

The need for better lighting is demonstrable. The desirability of new fixtures alone is not. The salesman can urge a prospect indefinitely to buy more modern and better looking equipment without getting himself far because the prospect is used to the old units, is scarcely aware of them most of the time. True, he may have thought in a vague sort of a way that they ought to be changed but he feels that there are "really important" things to be done first.

Instead of talking new fixtures at first, show him just how inadequate his present lighting is. Prove to him that it is actually costing him money every hour it is in use. Convince him that better lighting will pay him business dividends. Talk better lighting because once you

have sold him that, he will buy the equipment which provides it.

Every lighting salesman should carry a sight meter. There are a number on the market; compact, handy little gadgets which prove their case and leave no room for argument. They measure exactly the quantity of light present and classify it in relation to seeing needs. The use of one is the best and most convincing method of demonstrating illumination and its values.

It is a ready means of arousing the prospect's interest. When he has gained that, the experienced salesman can drive ahead to sure results. Lighting in all phases is worthy of enthusiasm and enthusiasm is contagious. Once your prospect has caught it from you, your sale is three-fourths made.

The printed page has its uses and is undoubtedly an aid in selling but it is far from being sufficient ammunition in the modern game of Lighting Salesmanship. Start with the sight meter. Talk Lighting. Demonstrate Lighting. THEN use your catalog to write up the order.



SOME FACTS for SALESMEN ABOUT THE MECHANICS of LIGHTING « «

You do not have to be an engineer to sell lighting successfully but a little practical knowledge judiciously applied often means the difference between happy landings and a crack-up.

This is a boiled down review of some of the facts already mentioned plus a few new ones which you should know. They are offered more in the spirit of setting up a few friendly markers and a warning or two than with any thought of complete instruction.

Perhaps the first thing necessary is to train your sense of observation. When you have learned to walk into a prospect's place of business and accurately size up his needs while waiting or even in the brief moments of introduction and opening talk, you'll be on your way. Of course there is much more to it than that, important details to work out later, but quick, intelligent observation is a good start.

HOW TO SIZE UP THE JOB

Learn to estimate quickly the approximate size, characteristics and lighting needs of interiors while opening your sales talk. Later you will want the accurate measurements and a chart of the conditions to be met.

Study the present equipment, number, location and size of units. Measure the light output with your sight meter. Determine the amount and kind of improvement needed.

Determine as quickly as possible whether you are going to be able to get satisfactory results with the same number of more efficient units or whether more fixtures will be needed. If you CAN replace unit for unit, make sure the outlets are correctly located and spaced.

The charts on pages 16 and 17 will help you.

HOW TO SELECT THE RIGHT UNIT « « « « « « «

There is no hard and fast rule here except the definite limitations of certain types of fixtures.

The purpose of illumination is very important and the room conditions even more so. For instance, indirect units to be practical must be hung under conditions which provide high efficiency of reflection and low absorption. The room or section of the room must be free from obstructions of any sort.

If direct fixtures are to be used, they should have enclosing globes of high quality diffusing glass, be mounted high enough above the working area to further reduce glare tendency, be spaced at proper intervals to enable a build up of the desired intensity level.

Refer to following charts for further suggestions.

WATTAGE and LIGHT «

Although an efficient fixture under good conditions will provide more light with less wattage than a poor fixture under any conditions, with present filament type light sources good lighting generally means increased wattage.

However, high wattage is never the only answer. If it were, all that would be needed to increase illumination levels would be to install more powerful light bulbs. In most instances this would simply mean increased glare without perceptible improvement in the amount of light. You can not put too much emphasis on the difference between brightness and light. They are frequently confused.

Fortunately the size of the socket to some extent controls the wattage that can be added to a given unit. 300-watt lamps or larger have mogul bases and so will not fit in most of the smaller fixtures.

Again you are referred to the charts which will give you a clearer exposition of the relation of wattage to light.

WIRING and LIGHT « «

Wiring belongs properly to the electrical contractor and the wise salesman will leave it with him. However a few things should be borne in mind.

Where more than one lamp is used, 1000 watts is about the upper limit for a circuit. More is not advisable.

Too light wiring will throw off all your efficiency calculations because of the resulting drop in voltage. For instance, a 15-ampere load carried 50 feet on No. 14 wire will cause a 4 volt drop in the branch circuit. In 100 feet the voltage drop will double. No. 12 is the minimum size to use for 50 feet and No. 10 for 100.

It is always a good rule to have an expert check the wiring and circuits before recommending improved lighting installations which will increase the load. If the wiring is too light you simply can not get the lighting results you are counting on, regardless of what type of fixture you recommend.

WALL COLORS « « « « «

The color, nature and condition of interior finish play a very important part in lighting.

While polished metal such as chromium trim is a highly efficient reflecting surface, it is not usually suitable for secondary reflection because of the concentrated glare. Where good lighting is the aim, walls and ceilings should be painted white, ivory, cream or light tan. These colors successively diminish reflection but are quite satisfactory. Darker colors absorb far more light than they reflect and are not advisable.

Smoke, dust, soot or grime of any sort soon reduces the efficiency of reflection regardless of the original color. Gloss finishes are equally unsatisfactory because they reflect light in glaring amounts and spoil its quality for seeing. A flat finish is better.

Whether or not the ceiling and walls are efficient reflectors is especially important in considering indirect lighting. Unless they throw back a high percentage of the output, this type of lighting will be ruled out of consideration because of the expense of operating

a unit powerful enough to offset the disadvantage of poor reflecting media.

THE FOOT-CANDLE « «

The foot candle bears the same relation to light measurement that degrees do to temperature.

It is doubtful if anyone would willingly read by the light of a wax candle held one foot away from the page. Even five candles at that distance would be considered highly unsatisfactory. Yet the one would give one "foot candle" and the other five "foot candles" of illumination. Somewhere between lies the average generally encountered.

The Sight Meter settles the question of how many foot-candles and leaves no room for dispute. It should be a part of every lighting salesman's kit.

AVOID COMPETITIVE SELLING « « « « « « « « «

The very best way to avoid a price battle has been our theme song all through these pages—SELL LIGHTING.

When you have convinced your prospect that he needs to improve his lighting and have built up his confidence in you to the point where he wants you to do the job, there will be no competition. What you are really selling him is a better system of lighting and you are providing him with the means to obtain it.

If possible avoid quoting any prices on fixtures until you are at the point of writing them into the order. Keep the discussion on lighting. Be honest in your spoken estimates of what the improvement will cost him but include everything; fixtures, lamps, wiring, installation and current. Show him all the advantages and economies of the investment.

Do not, except as a last desperate resort, offer or consent to install units "on trial." If you do, you are simply asking for trouble because it will only be a matter of hours before the word gets around to some competitor who will be calling on your prospect with a tryout offer of his own. Work fast and intelligently before the other fellow even has a chance to look in.

TABLE I - SUGGESTIONS ON TYPES OF EQUIPMENT

LIGHTING APPLICATION	INTENSITY LEVELS FOOT - CANDLES	TYPE OF UNIT SUGGESTED
General Offices	20 - 30	Indirect or semi-indirect recommended especially where units are within line of vision for extended periods.
Private Offices	15 - 25	Semi-indirect or indirect units preferable.
Drafting Rooms	25 - 40	Use indirect units if possible to insure complete diffusion and shadowless light.
School Classrooms	12 - 25	Indirect or semi-indirect units should be recommended.
Small Stores	12 - 20	Direct units with enclosing bowls for diffusion will be satisfactory. Indirect or semi-indirect may be used.
Large Stores	12 - 20	Choice depends largely upon atmosphere sought in department to be lighted.

TABLE II - SPACING OF LIGHTING OUTLETS

CEILING HEIGHT (Height in Clear)	SPACING BETWEEN OUTLETS		SPACING BETWEEN OUTSIDE OUTLETS AND WALL		APP. AREA PER OUTLET (usual spacings)
	USUAL	MAXIMUM	AISLES OR STORAGE NEXT TO WALL	DESKS, BENCHES, ETC. NEXT TO WALL	
(FEET)	(FEET)	NOT MORE THAN*		NOT MORE THAN	SQUARE FEET
8	7	7½	Usually one-half	3	50-60
9	8	8		3	60-70
10	9	9	actual spacing	3½	70-85
11	10	10½		3½	85-100
12	10-12	12	between units	3½-4	100-150
13	10-12	13		3½-4½	100-150
14	10-13	15		4-5	100-170
15	10-13	17		4-5	100-170
16	10-13	19		4-6	100-170
18	10-20	21		4-6	100-400
20	18-24	24		5-7	300-500
20 upwards	20-30	30		5-7	400-900

*Where it is definitely known that some form of indirect lighting will be used, the maximum spacing between outlets may be increased about two feet and the distance from the outside outlets to the wall may be increased by one foot.

TABLE III - CLASSIFICATION OF INTERIORS

APPROXIMATE PROPORTIONS OF ROOMS	COLOR CEILING AND UPPER SIDEWALLS	CONDITIONS FACTOR			
		DIRECT - LIGHTING — TYPE I		INDIRECT - LIGHTING — TYPES II AND III	
		MAINTENANCE		MAINTENANCE	
		VERY GOOD	FAIR	VERY GOOD	FAIR
Width 4 times ceiling height	Light	A	A	A	A
	Medium	A	A	A	B
	Dark	A	B	C	C
Width 2 times ceiling height	Light	A	B	A	B
	Medium	A	B	B	C
	Dark	B	C	C	*
Width equal to ceiling height	Light	B	C	B	C
	Medium	C	C	C	*
	Dark	C	C	C	*

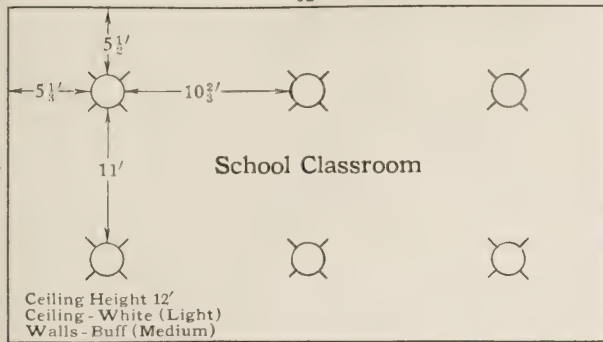
*Generally unsuited to indirect lighting.

Table IV—Illumination values calculated for various lamp sizes in various equipment types

EXAMPLE

(References Marked □ in Accompanying Tables)

32'



Typical Layout for School Classroom—Semi-indirect Lighting—(Type IV) Recommended—15 Foot Candles

From Table I

Maximum spacing allowable 12 ft.
Actual spacing used 10 2/3 x 11 ft.
Area per outlet 117 square feet

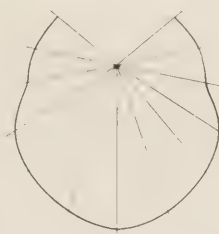
From Table II

Conditions Factor = A

From Table III

Under Type IV units—opposite 110 ft.—125 ft. spacing—conditions A show a 300-watt lamp will produce 11 to 15 footcandles. Properly wired, 500-watt lamps may be used in the future.

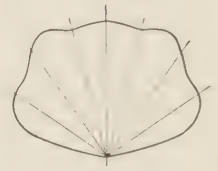
TYPE I
Direct Lighting



TYPE II
Semi-Indirect Lighting



TYPE III
Totally Indirect Lighting



Area Per Outlet Adequately Lighted or Approximate Spacing	Distance from Underside of Reflector to Floor to be Not Less Than	Conditions Factor	Average Foot Candles				Average Foot Candles				Average Foot Candles			
			150 Watt	200 Watt	300 Watt	500 Watt	200 Watt	300 Watt	500 Watt	750 Watt	200 Watt	300 Watt	500 Watt	1000 Watt
55-65 Sq. Ft. or 7'x7' Spacing	7' 6"	A	10-14	15-22	.....	.....	13-18	22-30	.....	.....	9-14	15-24	27-43	.....
		B	7-10	11-15	.....	.....	8-13	14-22	.....	.....	5-9	9-15	16-27	.....
		C	4-6	7-9	.....	.....	5-8	10-14	.....	.....	4-5	7-9	13-16	.....
65-75 Sq. Ft. or 8'x8' Spacing	8' 6"	A	9-13	13-19	21-31	.....	11-15	19-25	34-44	.....	7-12	13-20	23-35	.....
		B	6-9	9-13	15-21	.....	7-11	12-19	21-34	.....	5-7	8-13	14-23	.....
		C	4-6	6.5-8.0	11-15	.....	5-7	8-12	14-21	.....	3-5	6-8	11-14	.....
75-85 Sq. Ft. or 9'x9' Spacing	8' 6"	A	8-11	11-17	18-28	.....	8-12	16-22	28-39	.....	7-11	11-18	19-32	.....
		B	5-8	8-11	13-18	.....	6-8	10-16	18-28	.....	4-7	7-11	13-19	.....
		C	3.5-5.0	6-7	10-12	.....	4-6	7-10	13-18	.....	3-4	5-7	9-13	.....
85-95 Sq. Ft. or 9'x9' Spacing	9' 0"	A	7-10	10-14	17-24	30-43	8-11	14-19	25-34	.....	5-9	10-14	18-25	.....
		B	5-7	7-9	11-17	19-30	5-8	9-14	16-25	.....	3.5-5.0	7-10	13-18	.....
		C	3-4	5-6	7-11	13-19	4-5	6-9	11-16	.....	3.0-3.5	5-6	9-11	.....
95-110 Sq. Ft. or 10'x10' Spacing	9' 6"	A	6-9	9-12	15-21	27-37	7-10	12-17	23-31	35-47	5-8	9-14	16-25	.....
		B	4-6	6-8	9-15	16-27	5-7	8-12	15-23	23-35	3-5	5-9	10-16	.....
		C	2.5-4.0	4.5-5.0	6-9	11-16	3.5-5.0	5-8	10-15	15-23	2.5-3.0	4-5	7-10	.....
110-125 Sq. Ft. or 11'x11' Spacing	10' 0"	A	5-7	8-11	13-19	23-34	6-9	11-15	20-27	30-41	4-7	7-12	14-22	31-50
		B	4.5-5.0	5.5-7.0	8-13	14-23	4-6	7-11	13-20	20-30	2.5-4.0	4-7	8-14	18-31
		C	2.5-3.0	4.0-4.5	6-8	11-14	3-4	5-7	9-13	14-20	2.0-2.5	3.5-4.0	6-8	13-18
125-145 Sq. Ft. or 11'x11' Spacing	10' 6"	A	5-6	7-9	11-16	19-28	5-7	9-13	17-23	26-35	3.5-5.0	6-10	11-18	25-40
		B	3.5-4.5	5-6	7-11	13-19	3.5-5.0	6-9	11-17	17-26	2.0-3.5	4-6	7-11	16-25
		C	2-3	3.5-4.0	5-7	9-13	2.5-3.5	4-6	8-11	12-17	1.5-2.5	3-4	5-7	11-16
145-170 Sq. Ft. or 12'x12' Spacing	11' 6"	A	3.5-5.0	6-8	9-14	17-25	4-6	8-11	15-20	23-30	3-5	5-9	10-16	22-36
		B	3.0-3.5	4.5-5.0	6-9	11-17	3-4	5-8	9-15	14-23	2-3	3-5	6-10	13-22
		C	1.5-2.5	3.0-3.5	4-6	7-11	2-3	3.5-5.0	6-9	9-14	1.5-2.0	2.5-3.0	5-6	11-13
170-200 Sq. Ft. or 13'x13' Spacing	11' 6"	A	4-5	5-6	8-11	14-21	3.5-5.0	7-9	12-17	18-26	2.5-4.0	5-7	8-13	18-29
		B	2.5-3.0	4.0-4.5	5-8	9-14	2.0-3.5	4-7	8-12	12-18	1.5-2.5	3-4	5-8	11-18
		C	1.5-2.0	2.5-3.0	3.5-5.0	6-9	1.5-2.0	3-4	5-8	8-12	1.0-1.5	2-3	4-5	9-11
200-230 Sq. Ft. or 14'x14' Spacing	12' 6"	A	3-4	4-5	7-10	12-18	3.5-4.0	6-8	10-14	15-21	2.5-3.0	4-6	7-11	16-25
		B	2.0-2.5	3.5-4.0	4-7	8-12	2-3	4-6	7-10	10-15	.....	2.5-4.0	4-7	9-16
		C	1.0-1.5	2.0-2.5	3-4	5-8	1.5-2.0	2.5-4.0	5-7	8-10	.....	2.0-2.5	3.5-4.0	8-9
230-260 Sq. Ft. or 15'x15' Spacing	13' 0"	A	2.5-3.5	3.5-4.0	6-9	10-14	3-4	5-7	9-12	14-18	2-3	3.5-5.0	6-10	13-22
		B	1.5-2.0	3.0-3.5	3.5-6.0	7-10	2.0-2.5	3-5	6-9	9-14	.....	2.0-3.5	4-6	9-13
		C	1.0-1.5	1.5-2.0	2.0-3.5	5-7	1.5-2.0	2.5-3.0	4-6	6-9	.....	1.5-2.0	3-4	7-9
260-300 Sq. Ft. or 16'x16' Spacing	13' 6"	A	2-3	3-4	5-7	9-13	2.5-3.0	4-6	8-11	12-17	1.5-2.5	3-5	5-9	11-20
		B	1.0-1.5	2.5-3.0	3-5	6-9	1.5-2.0	3-4	6-8	9-12	.....	2-3	3-5	7-11
		C	.....	1.0-1.5	2.5-3.0	4-6	1-2	2-3	3-4	4-6	.....	.....	2.5-3.0	5.5-7.0
300-340 Sq. Ft. or 18'x18' Spacing	14' 6"	A	.....	3-4	4-6	8-10	2-3	3.5-5.0	7-9	10-14	.....	2.5-4.0	5-7	11-16
		B	.....	2.0-2.5	3-4	5-8	1.0-1.5	2.5-3.5	5-7	8-10	.....	1.5-2.5	3-4	7-9
		C	.....	.....	2.5-3.0	3.5-5.0	.....	1.5-2.5	3-5	4-8	.....	.....	2.0-2.5	4.5-5.5
340-390 Sq. Ft. or 19'x19' Spacing	15' 6"	A	.....	2.5-3.0	3.5-4.5	7-10	.....	3-4	6-8	9-12	.....	.....	4-6	9-13
		B	.....	1.5-2.0	2.5-3.5	4-7	.....	2-3	4-6	6-9	.....	.....	2.5-4.0	5.5-9.0
		C	.....	.....	2.0-2.5	3-4	.....	1.5-2.0	3-4	4-6	.....	.....	1.5-2.0	3.5-4.5

CAPITALIZE CURRENT INTEREST IN BETTER LIGHT « « « « « « « «

The vital importance of improving present standards of artificial lighting has carried the whole subject far beyond mere commercial considerations. As has already been said, the new Science of Seeing is perhaps chiefly responsible for the keen and widespread interest which is everywhere evident.

Strictly non-commercial groups such as the National Council for Safety have taken up the matter in its relation to their own special problems. So important is the need for conserving vision that Sight Saving Councils exist in the leading cities and many smaller communities. Even Societies for the Blind, determined to prevent if possible the tragedy of failing sight, are outspoken in their championship of Light for Seeing.

Doctors recommend better lighting not only for direct benefits to vision but for help in preventing many disorders of a nervous nature. Optometrists who make their living correcting defects of vision do not hesitate to preach the gospel of improved illumination.

Scientists are concerning themselves with experimentation and new developments in the field. Colleges incorporate the study or at least certain phases of it in their courses. Interest has spread like wild fire all over the country. By capitalizing this the lighting salesman will find unlimited opportunities opening up before him.

Strictly commercial activities, of course, have been and still are extensive. Aggressive promotion campaigns have been carried on by the leading manufacturers of light source units who are sparing no expense to take the message to the public in a complete and convincing manner.

Utility companies all over the country are active in helping to educate people to a full

recognition of the importance of providing themselves with higher intensities of a proper quality of illumination. They are cooperating with lamp and equipment manufacturers to improve the efficiency of lighting output and with sales organizations to bring about a wider distribution of more efficient fixtures.

Meanwhile the popular knowledge of what constitutes good lighting is continually increased through publicity, literature, radio talks, public lectures and demonstrations.

The prospect who hasn't heard about the subject and doesn't possess at least a rudimentary idea

of what it is all about is becoming more and more rare.

The modern fixture salesman is no peddler. He belongs to a new profession, one of which he can be justly proud. To be successful he must master the technique of his job but he finds on all sides available material to aid him. Once he does master the details there is no question as to the profits which will reward his honest efforts.



Typical group of interested men and women watching demonstrations and listening to the talks by Lighting for Seeing specialists



INDIRECT



ELECTRICAL TESTING LABORATORIES NEW YORK, N. Y.

REPORT NO. 138850

ORDER NO. 62527-S

PLATE NO. 28956

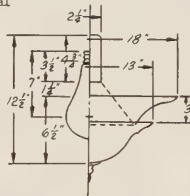
CANDLEPOWER DISTRIBUTION TRANQUILITE UNIT NO. V-1982*

Rendered to Cullford G. Kingsbury and Associates

One unit submitted for test.

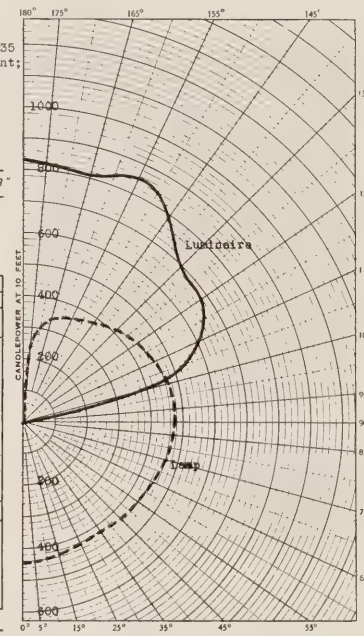
Lamp - 300 Watts; 115 Volts; 5490 Lumens; PS35
Inside Frosted Gas-Filled Bulb; C-7A Filament;
Mogul Base; General
Service.

Unit - "Chromalium"
finished metal.



LUMINAIRE DISTRIBUTION DATA					
Mean Vertical					
MID- ZONE ANGLES	CANDLEPOWER AT 10 FEET	ZONAL LUMENS	MID- ZONE ANGLES	CANDLEPOWER AT 10 FEET	ZONAL LUMENS
180°-175°	830		90°-85°	23	
175°	820	78	85°	16	17
165°	805	230	75°	10	10
155°	850	390	65°	9	9
145°	765	493	55°	7	6
135°	695	545	45°	6	5
125°	680	603	35°	6	4
115°	595	600	25°	5	2
105°	361	368	15°	5	1
95°	41	56	5°	6	1
			0°-HORIZ	6	
LIGHT FLUX VALUES					
ZONE		LUMENS		PERCENT	
		LAMP	LUMINAIRE	TOTAL LUMENS BASE LAMP	PERCENT LIGHT OUTPUT
0°-60°		1350	19	0.5	
0°-90°		2801	55	1	
90°-180°		2688	3363	61	62
0°-180°		5489	3418	62	

LUMINAIRE BRIGHTNESS



CANDLEPOWER PER SQUARE INCH
THE ARROWS INDICATE THE LOCATION AND ANGLE OF VIEW

LOCATIONS A B C D E F G H I J K L M

CP. PER SQ. IN.

*E.T.L. Identification No. 6367

TESTED BY CAS PLOTTED BY Mu COMPUTED BY Mu CHECKED BY St ISSUED August 13, 1936.

APPROVED BY William H. Fisher
ENGINEER IN CHARGE OF PHOTOMETRY

C. E. Houn
IN CHARGE OF TEST

BETTER LIGHT • BETTER SIGHT



Tranquilite Luminescent Indirect Lighting Units

For the Best Effect We Recommend the Use of Inside-Frosted Light Bulbs

CHAIN TYPE



Tranquilite No. V-1982
One Light Fixture with Vertical Lamp
Watt Capacity - 300 to 500
Spread 18 inches
Wired complete with Mogul Socket
Length overall 36 inches
Packed 1 to case
Finish: Chromalum
Code: Aihb

Tranquilite No. V-1985
One Light Fixture with Vertical Lamp
Watt Capacity - 500 to 1000
Spread 22 inches
Wired complete with Mogul Socket
Length overall 42 inches
Packed 1 to case
Finish: Chromalum
Code: Aihe

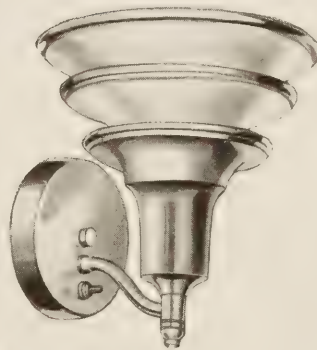
CASING TYPE



No. V-1992
Two Light Fixture
Watt Capacity 300 to 600
Spread 18 inches
Length overall 36 inches
Wired Complete - Medium Sockets
Packed 1 to case
Finish: Chromalum
Code: Aiib



Tranquilite No. V-1985-C
One Light Fixture with Vertical Lamp
Watt Capacity - 500 to 1000
Spread 22 inches
Wired complete with Mogul Socket
Length overall 42 inches
Packed 1 to case
Finish: Chromalum
Code: Aihec



No. V-1921
Diameter Backplate $4\frac{1}{2}$ inches
Extension $7\frac{1}{4}$ inches
Packed 6 to case - Wired Complete
Chromalum Finish
Code: Aqua

Tranquilite No. V-1982-C
One Light Fixture with Vertical Lamp
Watt Capacity - 300 to 500
Spread 18 inches
Wired complete with Mogul Socket
Length overall 36 inches
Packed 1 to case
Finish: Chromalum
Code: Aihbc

B E T T E R L I G H T • B E T T E R S I G H T



Streamline Semi-Indirect Commercial Lighting Units

FOR STORE, OFFICE AND GENERAL COMMERCIAL LIGHTING



No. V-551

Semi-indirect Wall Bracket

Backplate $4\frac{1}{2}$ inches

Spread 7 inches

Extension $7\frac{1}{2}$ inches

100 Watt Capacity

Opal Globe with Spun Reflector

Packed individually,

4 to unit

Finish: Satinchrome

Code: Eea

The Lustralite

This beautifully modern Semi-indirect unit performs a highly ornamental as well as functional purpose. The white Tensolite glass hemisphere is surmounted by a graceful reflecting louvre finished in Satinchrome with polished highlites. It has unlimited applications in the lighting of smart dress shops, restaurants, showrooms or wherever good lighting is required in one of its more attractive phases.

Cat. No.	Diameter	Finish	Socket	Length	Wattage	Code
J-510	18"	Satinchrome	Medium	36"	200-300	Eaj
J-511	18"	Satinchrome	Mogul	36"	300-500	Eaa

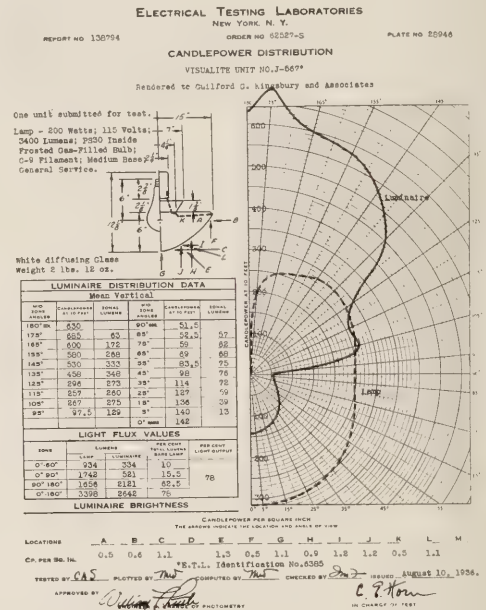
Wired Complete
Packed one to carton

B E T T E R L I G H T • B E T T E R S I G H T



Streamline Semi-Indirect Commercial Lighting Units

FOR STORE, OFFICE AND GENERAL COMMERCIAL LIGHTING



The Visualite

This fine series of Semi-indirect lighting units has been scientifically designed to render maximum illuminating performance consistent with the precepts of the Better Light-Better Sight program. Their smooth flowing contours and efficient parabolic shape unite the quality of eye value with that of eye conservation. Finest Tensolite Glass is used in the diffusing hemisphere.

Cat. No.	Diameter	Finish	Socket	Length	Wattage	Code
J-567	16"	Satinchrome	Medium	30"	200-300	Efg
J-537	18"	Satinchrome	Mogul	36"	300-500	Ecg

Wired complete
Packed one to carton

BETTER LIGHT • BETTER SIGHT



DIRECT



The Cavalcade Unit

FIRED ENAMEL BOTTOMS WITH PRISMATIC TOP AND CENTER BULLS-EYE

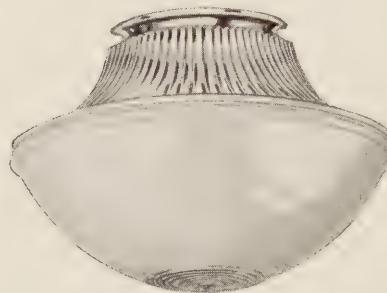


Showing No. J-3813 Glass
with No. V-556 Hanger
For Hanger Specifications
see Page 30



No. J-595—9"					
Cat. No.	Spread	Depth	No. Lights	Std. Pkg.	Code
J-595	9"	4½"	2	6	Eje
J-596	13"	4⅞"	3	1	Ejf
J-597	15"	5¼"	3	1	Ejg
Opal Glassware - Chromium Ceiling Plate					

FOR MEZZANINE, CORRIDOR AND
BALCONY LIGHTING



Showing No. J-3813 Glass
with No. V-156-C Hanger
For Hanger Specifications
see Page 30

THE CAVALCADE UNIT

No.	Size	Fitter	Depth	Std. Pkg.	Code
J-3806	6 1/2"	2 1/4"	5 1/2"	12	Chif
J-3807	7"	4"	6"	12	Chjg
J-3808	8 1/2"	4"	6 1/2"	12	Chji
J-3813	13"	6"	9"	2	Chac

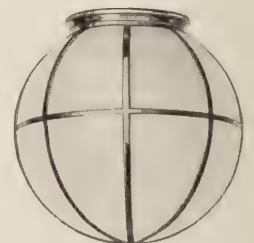


No. J-576
Black line decoration
3 1/4 inch fitter
6 inch diameter
2 1/4 dozen to case
Code: Truck



DEEP TYPE REFLECTOR

No.	Size	Depth	Fitter	Packed	Code
J-114	6"	4 1/2"	2 1/4"	6 doz. to case	Tokio
J-116	7"	5 1/2"	2 1/4"	4 doz. to case	Trout



No. J-575
Green line decoration
3 1/4 inch fitter
6 inch diameter
2 1/4 dozen to case
Code: Pork

BETTER LIGHT • BETTER SIGHT



The Virden Emperor Unit

OPAL GLASSWARE OF HIGH QUALITY AND SMARTEST STYLING



A Stunning Combination of
No. V-556 Ornamental Streamline Hanger
with Emperor No. J-3514
For Hanger Specifications
see Page 30



A Smart Assembly
for Low Ceiling Installations
using No. V-56-E
with Emperor No. J-3514

For Holder Specifications see Pages 31 and 33



An Excellent
School or Store Unit
using No. V-156 Streamline Hanger
in Conjunction with Emperor No. J-3514
For Hanger Specifications
see Page 31

The Emperor Unit, in the short
time that it has been on the
market, has firmly established
itself as the outstanding value
in the Illuminating Glassware
field.



THE EMPEROR—PLAIN WHITE

No.	Size	Fitter	Depth	Std. Pkg.	Code
J-3508	8½"	4"	7"	12	Cejh
J-3510	10"	4"	7½"	8	Cejj
J-3512	12"	6"	7¾"	4	Ceab
J-3514	14"	6"	8¾"	2	Cead
J-3516	16"	6"	9¼"	2	Ceaf



THE EMPEROR—BLACK LINED

No.	Size	Fitter	Depth	Std. Pkg.	Code
J-3508-L	8½"	4"	7"	12	Cejhl
J-3510-L	10"	4"	7½"	8	Cejal
J-3512-L	12"	6"	7¾"	4	Ceabl
J-3514-L	14"	6"	8¾"	2	Ceadl
J-3516-L	16"	6"	9¼"	2	Ceaf1

BETTER LIGHT • BETTER SIGHT



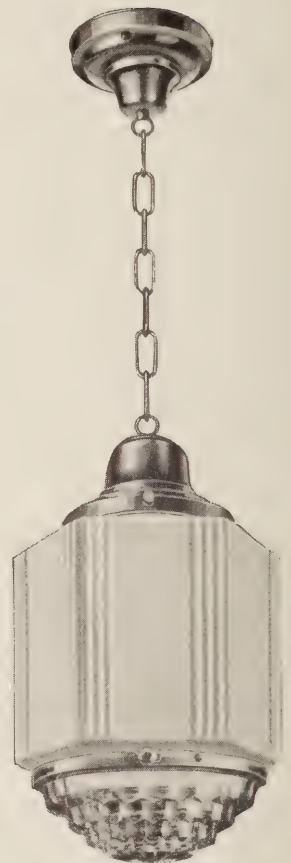
CRYSTAL BOTTOM UNITS



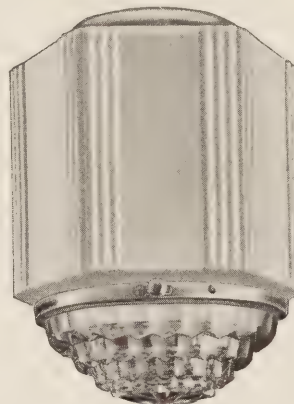
Showing No. J-519-D
with No. V-186 Hanger
For Hanger Specifications
see Page 31



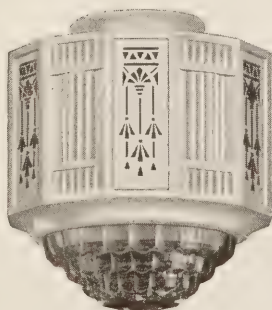
No. J-519-D
Crystal Bottom Unit
Black Decoration
Diameter $9\frac{1}{2}$ inches • Depth $12\frac{1}{2}$ inches
Fitter 6 inches
100-200 Watt Capacity
Packed individually
Code: Master



Showing No. J-519
with No. V-46 Hanger
For Hanger Specifications
see Page 31



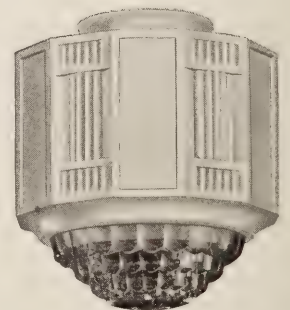
No. J-519
Crystal Bottom Unit
Plain White
Diameter $9\frac{1}{2}$ inches • Depth $12\frac{1}{2}$ inches
Fitter 6 inches
100-200 Watt Capacity
Packed individually
Code: Mystic



No. J-517-D
Crystal Bottom Unit
Black Decoration
4 inch fitter
Diameter $7\frac{3}{4}$ " • Depth $8\frac{1}{2}$ "
Packed 12 to case
Code: Leap



No. J-518-C
Crystal Bottom Unit
Diameter $8\frac{1}{2}$ inches • Depth 7 inches
4 inch Fitter
100-150 Watt Capacity
Packed 12 to case
Code: Dola



No. J-517
Crystal Bottom Unit
Plain White
4 inch fitter
Diameter $7\frac{3}{4}$ " • Depth $8\frac{1}{2}$ "
Packed 12 to case
Code: Lump

B E T T E R L I G H T • B E T T E R S I G H T



Highest Quality Tensolite Opal Glassware



OPAL COMMERCIAL GLASSWARE

No.	Size	Fitter	Depth	Std. Pkg.	Code
J-2	8½"	4"	7"	12	Tabby
J-4	10"	4"	7½"	8	Tabor
J-6	12"	6"	8"	4	Talon
J-08	14"	6"	8½"	2	Taper
J-10	16"	6"	11"	2	Tenor



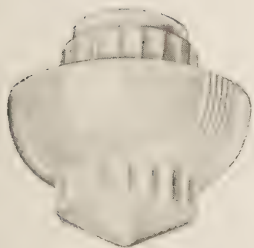
Showing No. J-08
with No. V-46 Hanger
For Hanger Specifications
see Page 31



No. J-714-B
14 x 12½ x 6 inches
Black Line Decoration
Packed individually
Code: Gadb



Showing No. J-714
with No. V-156 Hanger
For Hanger Specifications
see Page 31



No. J-709
8½ x 8 x 4 inches
Plain White
Packed 8 to case
Code: Gji



No. J-714
14 x 12½ x 6 inches
Plain White
Packed individually
Code: Gad



No. J-709-B
8½ x 8 x 4 inches
Black Line Decoration
Packed 8 to case
Code: Gjib

B E T T E R L I G H T • B E T T E R S I G H T

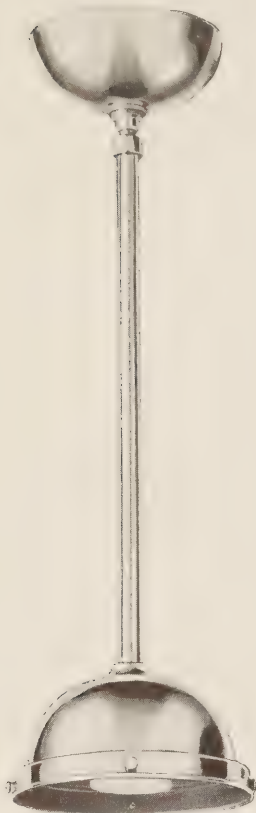


General, Commercial, School and Store Lighting

STREAMLINE TYPE

ORNAMENTAL STREAMLINE TYPE

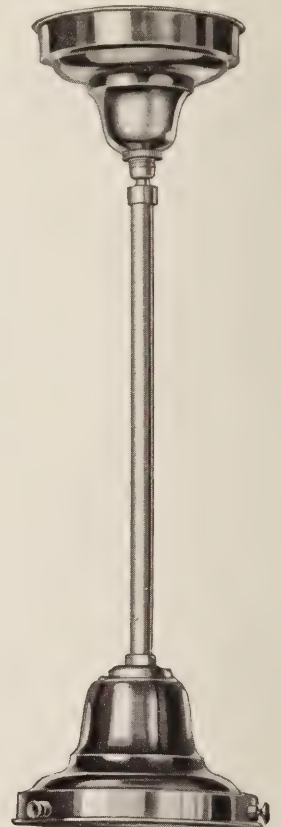
REGULAR SCREW TYPE



No. V-156-C—6 inch
No. V-154-C—4 inch



No. V-556—6 inch
No. V-554—4 inch



No. V-46-C—6 inch
No. V-45-C—4 inch

STREAMLINE TYPE SPECIFICATIONS

Catalog No.	Size Fitter	Socket	Casing	Length Overall	Finish	Code
No. V-154-C	4"	Medium	Sectional	24 inches	Chromium	Aedcc
No. V-156-C	6"	Medium	Sectional	24 inches	Chromium	Aefcc
No. V-156-CM	6"	Mogul	Sectional	24 inches	Chromium	Aefcmc

ORNAMENTAL STREAMLINE TYPE SPECIFICATIONS

Catalog No.	Size Fitter	Socket	Length Overall	Finish	Code
No. V-554	4"	Medium	36 inches	Chromium	Eed
No. V-556	6"	Medium	36 inches	Chromium	Eef
No. V-556-M	6"	Mogul	36 inches	Chromium	Eefm

REGULAR SCREW TYPE SPECIFICATIONS

Catalog No.	Size Fitter	Socket	Casing	Length Overall	Finish	Code
No. V-45-C	4"	Medium	Sectional	24 inches	St. Bronze	Tang
No. V-46-C	6"	Medium	Sectional	24 inches	St. Bronze	Toga
No. V-46-CM	6"	Mogul	Sectional	24 inches	St. Bronze	Tuff
No. V-45-C	4"	Medium	Sectional	24 inches	Chromium	Tear
No. V-46-C	6"	Medium	Sectional	24 inches	Chromium	Tabu
No. V-46-CM	6"	Mogul	Sectional	24 inches	Chromium	Tool

The Casing Hangers are equipped with casings assembled in 7½ inch sections which permit the hangers to be shortened or lengthened accordingly. For cost of extra sections with Collar see price sheet.

B E T T E R L I G H T • B E T T E R S I G H T

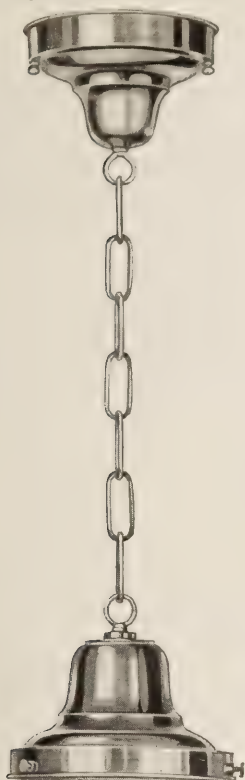


General, Commercial, School and Store Lighting

REGULAR SCREW TYPE

MODERNISTIC TYPE

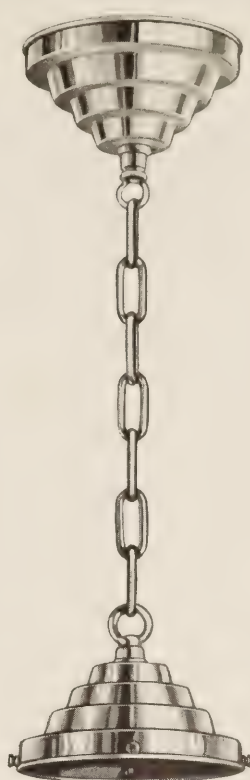
STREAMLINE TYPE



No. V-46—6 inch
No. V-45—4 inch

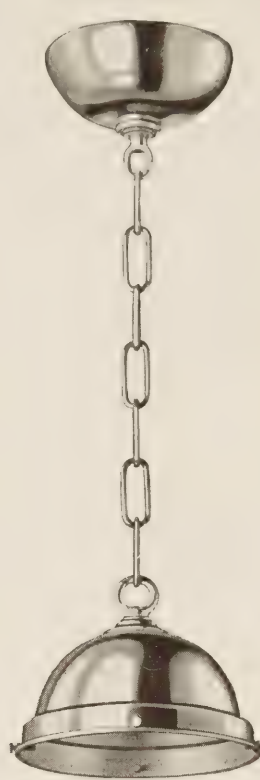
Catalog No.	Size Fitter
No. V-45	4"
No. V-45	4"
No. V-46	6"
No. V-46	6"
No. V-46-M	6"
No. V-46-M	6"
No. V-184	4"
No. V-186	6"
No. V-186-M	6"
No. V-154	4"
No. V-156	6"
No. V-156-M	6"

Socket
Medium
Medium
Medium
Medium
Mogul
Mogul
Medium
Medium
Mogul
Medium
Medium
Mogul



No. V-186—6 inch
No. V-184—4 inch

Length Overall	Canopy Type	Std. Pkg.
36"	Strap	24
36"	Strap	24
36"	Strap	24
36"	Strap	24
36"	Strap	24
36"	Strap	24
36"	Stem	24
36"	Stem	24
36"	Stem	24
36"	Screw Collar	24
36"	Screw Collar	24
36"	Screw Collar	24



No. V-156—6 inch
No. V-154—4 inch

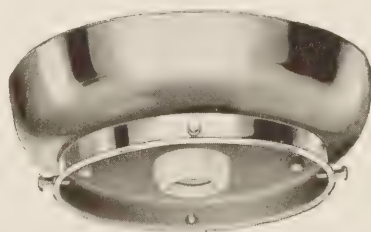
Finish	Code
St. Bronze	Carlie
Chromium	Yuke
St. Bronze	George
Chromium	Yazo
St. Bronze	Gopher
Chromium	Yipe
Chromium	Rapier
Chromium	Ramrod
Chromium	Gargle
Chromium	Caed
Chromium	Caef
Chromium	Caefm



No. V-34—4" No. V-36—6"

Catalog No.	Size Fitter
No. V-34	4"
No. V-34	4"
No. V-36	6"
No. V-36	6"
No. V-164	4"
No. V-166	6"
No. V-50-E	4"
No. V-56-E	6"

Socket
Medium
Medium
Medium
Medium
Medium
Bare
Medium



No. V-56—6"
No. V-50-E—4"

Diameter Canopy
6 1/4"
6 1/4"
6 1/4"
6 1/4"
6 1/4"
6 1/4"
6 1/4"
8 3/4"

Std. Pkg.
48
48
24
24
24
24
48
24



No. V-164—4" No. V-166—6"

Finish	Code
St. Bronze	Arbor
Chromium	Organ
St. Bronze	Arena
Chromium	Mummy
Chromium	Join
Chromium	Java
Chromium	Wood
Chromium	Efec

BETTER LIGHT • BETTER SIGHT



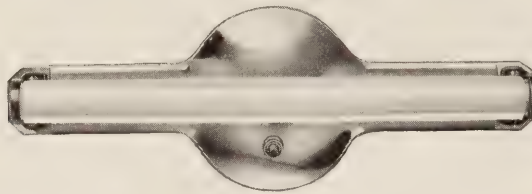
Decorative Units for Lavatories and Restrooms

An Artistically Designed Utility Series



No. V-82

Backplate 7 x 4 inches
Wired Pull-Chain
Packed individually, 12 to case
Finish: Chromalum Code: Zake



No. V-86

Lumiline Lamp Bracket
Wired with sockets and canopy switch
Lamp is not included
Length 12½ inches Diameter backplate 4¼ inches
Chromalum finish
Packed individually, 12 to case
Code: Hfx



No. V-85

Backplate 7 x 4¼ inches
Opal Cylinder Shade
Wired Pull-Chain
Packed individually, 12 to case
Finish: Chromalum Code: Zuma



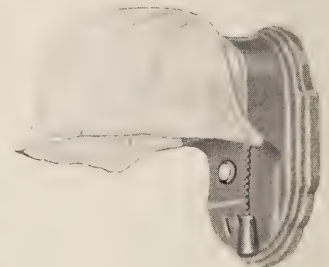
No. V-215

Porcelain Screwless Holder
with White Opal Shade
Diameter Backplate 5 inches
Packed individually, 12 to case
Finish With Outlet Less Outlet
Plain White Waco Waza



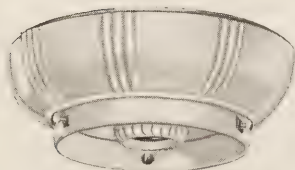
No. V-219

Vapor Proof Unit
for Bathroom or Shower
Diameter canopy 4⅝ inches
Packed individually, 12 to case
Finish: White porcelain with glass unit
Code: Halo



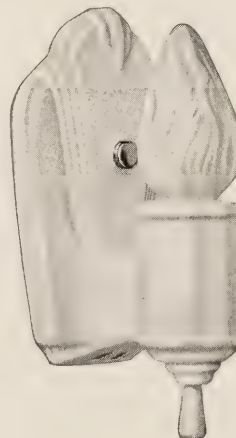
No. V-214

Porcelain Screwless Holder
with White Opal Shade
Backplate 4 x 5¼ inches
Packed individually, 12 to case
Finish With Outlet Less Outlet
White Rosh Ruzo



No. V-218

Porcelain Kitchen Holder
4-inch porcelain holder with eyelet
Diameter canopy 6¾ inches
Wired with keyless receptacle
Packed individually, 12 to case
Finish Code
Plain White Bebe



No. V-52

Porcelain Bracket
Dimensions: 4⅝ x 7 inches
Extension 3¾ inches
Wired with Pull Switch
Packed individually, 12 to case
Finish: Plain White
Less Convenience Outlet
Code: Jimsen
With Convenience Outlet
Code: Jersey



No. V-217

Porcelain Beamlite
Diameter canopy 6½ inches
Wired with keyless receptacle
Packed individually, 12 to case
Finish Code
Plain White Bird

BETTER LIGHT • BETTER SIGHT



Streamline Beamhites and Holders

Smooth Flowing Contours—Smart, Up-to-the-Minute Designs



No. V-140-E

Streamline Beamlite
Diameter of Canopy $7\frac{1}{2}$ inches
Bare with strap
Packed individually,
24 to case

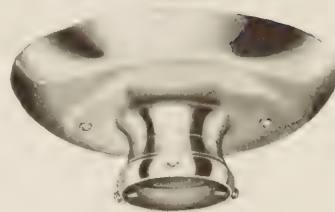
Finish	Code
Chromium	Adjc
Ivory	Adj



No. V-60-E

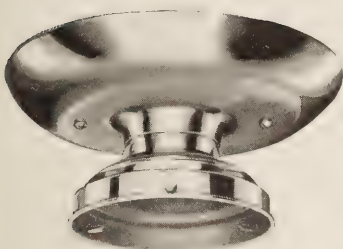
Streamline Kitchen Holder
Diameter of Canopy $5\frac{1}{2}$ inches
Bare with strap
Packed individually,
48 to case

Finishes: White Enamel	Code: Fjew
Chromium	Code: Fjec



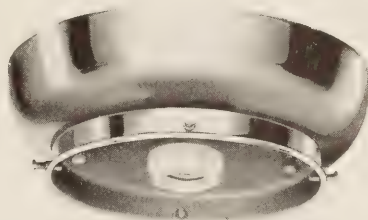
No. V-122-E

Streamline Holder
 $2\frac{1}{4}$ inch Fitter
Diameter of Canopy $7\frac{1}{2}$ inches
Bare with strap
Packed individually,
24 to case
Finish: Chromium
Code: Abbc



No. V-124-E

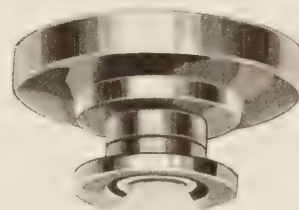
Streamline Holder
4 inch Fitter
Diameter of Canopy $7\frac{1}{2}$ inches
Bare with strap
Packed individually,
24 to case
Finish: Chromium
Code: Abdc



No. V-56-E

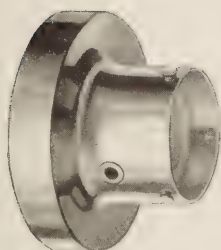
Streamline Holder
6 inch Fitter
Diameter of Canopy 8 inches
Wired with keyless receptacle
Packed individually,
24 to case

Finish	Code
Chromium	Efec



No. V-43-E

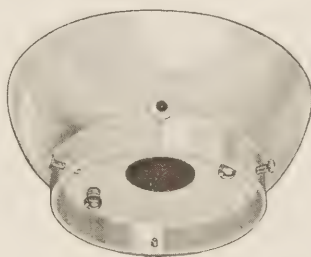
Bare with strap
With Eyelet
Diameter canopy $5\frac{1}{2}$ inches
Packed individually, 48 to case
Chromium Finish
Code: Zyra



No. V-62-E

Streamline Bath Bracket
or Ceiling Holder
 $2\frac{1}{4}$ inch Fitter
Diameter of Canopy $4\frac{1}{2}$ inches
Bare with strap
Packed individually,
48 to case

Finishes: White Enamel	Code: Fbew
Chromium	Code: Fbec



No. V-50-E

Streamline Kitchen Holder
Bare with strap
Diameter of Canopy $6\frac{1}{4}$ inches
4 inch Fitter
48 to case

Finish	Code
White Enamel	Metric
Chromium	Wood



No. V-40-E

Bare with strap
Diameter of Canopy $5\frac{1}{2}$ inches
Packed 48 to case

Finish	Code
Ivory	Trophy
Pewter	Weal
Old Brass	Weep
Chromium	Welt
Statuary Bronze	Wend
White Enamel	Alex



Beamlights and Holders for Corridor Lighting

In Appropriate Designs and Finishes for Every Requirement

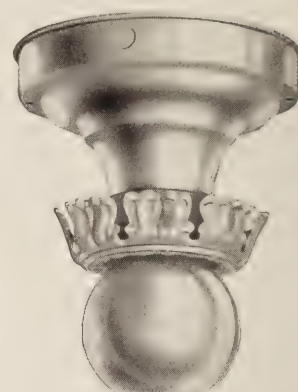
HOLDERS ARE PACKED
IN INDIVIDUAL CARTONS
WITH STRAPS



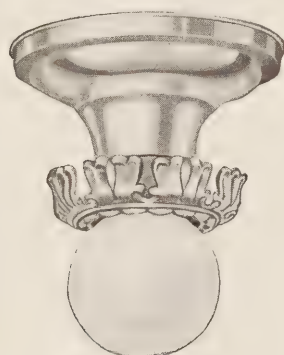
No. V-42-E
Bare with strap
With eyelet
Diameter canopy $6\frac{1}{4}$ inches
Packed individually, 48 to case
Finish: Ivory Pastelle
Code: Nurse



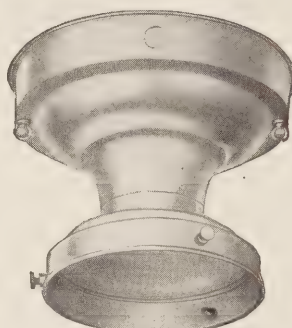
No. V-49-E
Bare with strap
With eyelet
Diameter canopy $7\frac{1}{2}$ inches
Packed individually, 24 to case
Finish Ivory Pastelle Code Zuna
Antique Ivory Zute



No. V-2542-E
Bare with strap
Diameter canopy $5\frac{1}{2}$ inches
With pull-chain eyelet and deep flange
with knockout
Packed individually, 48 to case
Finish Brownstone Code Waft
Ivory Pastelle Nabob



No. V-41-E
Bare with strap
With eyelet
Diameter canopy $5\frac{1}{2}$ inches
Packed 48 to case
Finish Ivory Pastelle Code Murad
Brownstone Wash



No. V-25-E
Bare with strap
4 inch kitchen holder
 $5\frac{7}{8} \times 4\frac{3}{4}$ inches deep
With pull-chain eyelet and
deep flange with knock-out
Packed individually,
with straps and screws
48 to case
Finish White Enamel Code Nomad
Statuary Bronze Wale
Chromium Ward



No. V-44-E
Bare with strap
With eyelet $\frac{3}{4}$ inch flange
Diameter canopy $4\frac{1}{4}$ inches
60 to Case Code Wild
Finish Brownstone Aroma
Ivory Pastelle



No. V-54
Bare with strap
4 inch fitter
Diameter canopy $5\frac{1}{2}$ inches
Packed individually, 48 to case
Finish: Ivory Pastelle
Code: Zimo



No. V-47-E
Bare with strap
Diameter canopy $5\frac{1}{2}$ inches
Packed individually, 48 to case
Finish Ivory Pastelle Code Zoru
Gold Polychrome Zelu

THERE ARE NO GREATER DOLLAR
FOR DOLLAR VALUES THAN THE
BEAMLIGHTS AND HOLDERS SHOWN
ON THESE PAGES

BETTER LIGHT • BETTER SIGHT



Miscellaneous Holders Brackets and Beamlights

Two Coats Assure Lasting Quality in the Enamel Finishes

HOLDERS ARE PACKED
IN INDIVIDUAL CARTONS
WITH OFF-SET STRAPS



No. V-24

Bare with strap
4 inch ceiling holder
5½ inch diameter
Packed 48 to case

Finish
Browntone
White Enamel

Code
Whig
Oaken



No. V-25-E

Bare with strap
4 inch kitchen holder
5½ x 4¾ inches
With pull-chain eyelet and
deep flange with knock-out
Packed individually,
with straps and screws,
48 to case

Finish
White Enamel
Statuary Bronze
Chromium

Code
Nomad
Wale
Ward

No. V-23
Bare with strap
3¼ inch ceiling holder
5½ inch diameter
Packed 48 to case

Finish
Browntone
Black Enamel

Code
Whet
Negro

No. V-22

Bare with strap
2¼ inch ceiling holder
5½ inch diameter
Packed 48 to case

Finish
Browntone
Ivory
White Enamel

Code
Wick
Wife
Luxor

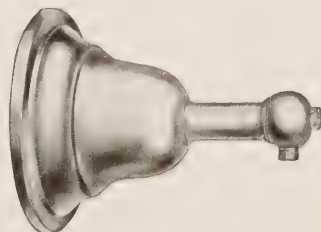


No. V-20-E

Bare—Less strap
Diameter canopy 5½ inches
With pull-chain eyelet
25 to package—200 to case

Finish
White Enamel
Browntone
Ivory

Code
Orion
Worm
Writ



No. V-901-21

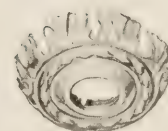
12 to carton—72 to case
Brushed Brass Finish
Without Socket Cover
Code: Pansy

10 to carton—60 to case
Browntone Finish
With Socket Cover
Code: Peril

10 to carton—60 to case
With Socket Cover

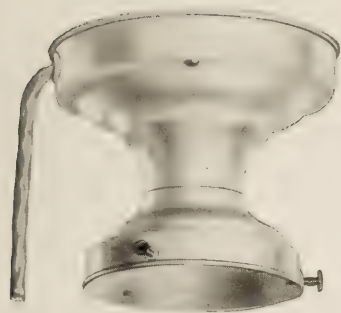
Finish
White Enamel
Statuary Bronze

Code
Pedal
Ache



No. V-30

Ball-lamp adapter
Screws on standard socket
25 to package—500 to case
Finish: Rich Gilt
Code: Rebel



No. V-25-CO

Regular No. 25-E
wired with keyless receptacle
and 4 foot silk cord
with combination pendant switch
and convenience outlet
Packed individually, 48 to case
White Enamel Finish

Code: Notus

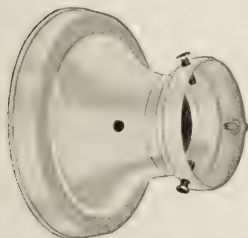


No. V-21-E

Bare—Less strap
Diameter canopy 4¼ inches
Deep flange with knock-out
and pull-chain eyelet
10 to package—100 to case

Finish
White Enamel
Browntone

Code
Omega
Wasp



No. V-26-E

Bare with strap
Bathroom bracket
2¼ inch fitter
60 to case

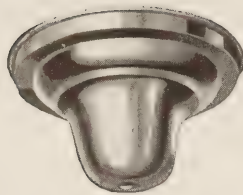
Finish
White Enamel
Chromium

Code
Razor
Wolf

B E T T E R L I G H T • B E T T E R S I G H T



Miscellaneous Holders and Parts



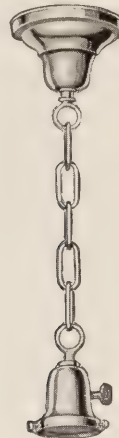
No. V-64

4½ x 2¾ inches
25 to package—250 to case
Browntone Finish

No. V-64-1/8 Hole	Code: Lorna
No. V-64 Nipple	Code: Edith
No. V-64-¾ Slip	Code: Ethel

Brushed Brass Finish

No. V-64-1/8 Hole	Code: Harry
No. V-64 Nipple	Code: Helen
No. V-64-¾ Slip	Code: Frank



No. V-209

Chain Pendant with 2¼" Holder
Packed individually, 48 to case

Finish
Browntone
Ivory

Code
Bugle
Bobby

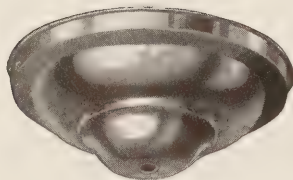


No. V-63-¾S

¾-inch slip canopy
5½ inches in diameter
7/8-inch flange with knockout
25 to package—100 to case
Statuary Bronze Finish
Code: Relic

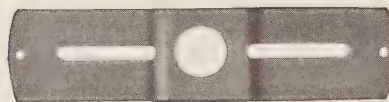
No. V-63-1/8 Hole

5½ inches in diameter
7/8-inch flange with knockout
25 to package—100 to case
Statuary Bronze Finish
Code: Remus



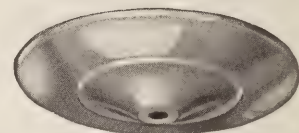
No. V-68

Less strap
5½-inch diameter
Drop cord canopy
Bushed eyelet
25 to package—200 to case
Finish: Browntone
Code: Roger



Off-set Straps

4-inch strap and screws
5-inch strap and screws
6-inch strap and screws
5-inch strap with screws and thumb knobs
6-inch strap with screws and thumb knobs

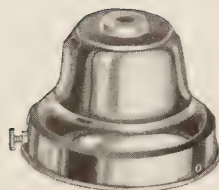


No. V-67

Outlet Closer
Diameter 5¼ inches
Packed 25 to package

Finish
Ivory
Brushed Brass

Code
Giant
Swim



No. V-14

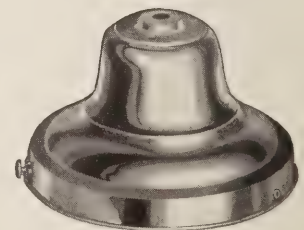
4-inch commercial holder
10 to package
Statuary Bronze Finish
Code: River



No. V-149

Cast Metal Porch Ring
Diameter 6⅛ inches
Fitter 3¼ inches
Finish: Black Enamel
Packed 24 to case
Code: Glay

Also furnished bare less strap
Packed in bulk
200 to barrel



No. V-16

6-inch commercial holder
2 lug and 1 screw type
10 to package—100 to case
Statuary Bronze Finish
Code: Rival

NUMERICAL INDEX and PRICE LIST

COVERING

CATALOG No. 37-S

Superseding All Previous Price Lists and Price Quotations

FEBRUARY 15th, 1937

Under Existing Circumstances Prices Are Subject to Change Without Notice

All Prices Subject to Federal and State Taxes

- N.B.—A. Mazda Lamps are not included in the price of the fixtures
 B. Always use Catalog Number when ordering
 C. Kindly specify finish desired where more than one is listed
 D. Merchandise returned to us for any reason without our consent will not be accepted

Cat. No.	Finish	Page No.	Code	Price	Cat. No.	Finish	Page No.	Code	Price
J-2	Tensolite	29	Tabby	96 ⁷⁶ \$.90	V-49-E	Antique Ivory	34	Zute	\$.60
J-4	Tensolite	29	Tabor	1.74 ^{1.65}	V-50-E	White Enamel	31-33	Metric	.63
J-6	Tensolite	29	Talon	2.97 ^{2.82}	V-50-E	Chromium	31-33	Wood	.96
J-08	Tensolite	29	Taper	3.81 ^{3.63}	V-52	White, with outlet	32	Jersey	1.65
J-10	Tensolite	29	Tenor	5.61 ^{5.34}	V-52	White, less outlet	32	Jimsen	1.35
V-14	Statuary Bronze	36	River	.42	V-54	Ivory Pastelle	34	Zimo	.54
V-16	Statuary Bronze	36	Rival	.54	V-56-E	Chromium	31	Efec	1.65
V-20-E	White Enamel	35	Orion	.18	V-60-E	Chromium	33	Fjec	.84
V-20-E	Ivory	35	Writ	.18	V-60-E	White Enamel	33	Fjew	.54
V-20-E	Browntone	35	Worm	.18	V-62-E	White Enamel	33	Fbew	.42
V-21-E	White Enamel	35	Omega	.18	V-62-E	Chromium	33	Fbec	.63
V-21-E	Browntone	35	Wasp	.18	V-63	$\frac{1}{8}$ Hole Statuary Bronze	36	Remus	.36
V-22-E	Browntone	35	Wick	.39	V-63	$\frac{3}{4}$ Slip Statuary Bronze	36	Relic	.39
V-22-E	Ivory	35	Wife	.39	V-64	Nipple Browntone	36	Edith	.21
V-22-E	White Enamel	35	Luxor	.39	V-64	Nipple Brush Brass	36	Helen	.27
V-23	Browntone	35	Whet	.42	V-64	$\frac{1}{8}$ Hole Browntone	36	Lorna	.18
V-23	Black Enamel	35	Negro	.42	V-64	$\frac{1}{8}$ Hole Brush Brass	36	Harry	.24
V-24	Browntone	35	Whig	.42	V-64	$\frac{3}{4}$ Slip Browntone	36	Ethel	.21
V-24	White Enamel	35	Oaken	.42	V-64	$\frac{3}{4}$ Slip Brush Brass	36	Frank	.27
V-25-E	White Enamel	34-35	Nomad	.45	V-67	Ivory	36	Giant	.18
V-25-E	Statuary Bronze	34-35	Wale	.54	V-67	Brush Brass	36	Swim	.21
V-25-E	Chromium	34-35	Ward	.75	V-68	Browntone	36	Roger	.18
V-25-CO	White Enamel	35	Notus	1.80	V-82	Chromalum	32	Zake	2.40
V-26-E	White Enamel	35	Razor	.39	V-85	Chromalum	32	Zuma	3.90
V-26-E	Chromium	35	Wolf	.60	V-86	Chromalum	32	Hfx	3.90
V-30	Rich Gilt	35	Rebel	.12	J-114	Tensolite	26	Tokio	63 ⁶⁰
V-34	Statuary Bronze	31	Arbor	.90	J-116	Tensolite	26	Trout	84 ⁸¹
V-34	Chromium	31	Organ	1.26	V-122-E	Chromium	33	Abbc	1.20
V-36	Statuary Bronze	31	Arena	.99	V-124-E	Chromium	33	Abdc	1.26
V-36	Chromium	31	Mummy	1.35	V-140-E	Chromium	33	Adjc	1.08
V-40-E	Ivory	33	Trophy	.42	V-140-E	Ivory	33	Adji	.66
V-40-E	Pewter	33	Weal	.54	V-149	Black, Wired	36	Glav	.75
V-40-E	Old Brass	33	Weep	.54	V-149	Black, Bare, Bulk Packing	36	Glav	.45
V-40-E	Chromium	33	Welt	.75	V-154-C	Chromium	30	Aedcc	4.05
V-40-E	Statuary Bronze	33	Wend	.57	V-154	Chromium	31	Caed	3.00
V-40-E	White Enamel	33	Alex	.42	V-156-C	Chromium	30	Aefcc	4.20
V-41-E	Ivory Pastelle	34	Murad	.42	V-156	Chromium	31	Caef	3.15
V-41-E	Browntone	34	Wash	.42	V-156-CM	Chromium	30	Aefcmc	4.80
V-42-E	Ivory Pastelle	34	Nurse	.54	V-156-M	Chromium	31	Caefm	3.75
V-43-E	Chromium	33	Zyra	.90	V-164	Chromium	31	Join	1.50
V-44-E	Ivory Pastelle	34	Aroma	.36	V-166	Chromium	31	Java	1.65
V-44-E	Browntone	34	Wild	.36	V-184	Chromium	31	Rapier	2.55
V-45	Statuary Bronze	31	Carlie	1.50	V-186	Chromium	31	Ramrod	2.70
V-45	Chromium	31	Yuke	2.10	V-186-M	Chromium	31	Gargle	3.30
V-45-C	Statuary Bronze	30	Tang	3.00	V-209	Browntone	36	Bugle	1.35
V-45-C	Chromium	30	Tear	3.60	V-209	Ivory or White Enamel	36	Bobby	1.50
V-46	Statuary Bronze	31	George	1.65	V-214	White, with outlet	32	Rosh	3.60
V-46	Chromium	31	Yazo	2.25	V-214	White, less outlet	32	Ruzo	3.30
V-46-M	Statuary Bronze	31	Gopher	2.25	V-215	White, with outlet	32	Waco	2.70
V-46-M	Chromium	31	Yipe	2.85	V-215	White, less outlet	32	Waza	2.40
V-46-C	Statuary Bronze	30	Toga	3.15	V-217	White	32	Bird	1.50
V-46-C	Chromium	30	Tabu	3.75	V-218	White	32	Bebe	1.50
V-46-CM	Statuary Bronze	30	Tuff	3.75	V-219	White	32	Halo	3.00
V-46-CM	Chromium	30	Toot	4.35	J-510	Satinchrome	23	Eaj	13.05
V-47-E	Ivory Pastelle	34	Zotu	.48	J-511	Satinchrome	23	Eaa	13.65
V-47-E	Gold Polychrome	34	Zelu	.48	J-517	Crystal Bottom	28	Lump	204 ^{1.95}
V-49-E	Ivory Pastelle	34	Zuna	.60	J-517-D	Crystal Bottom	28	Leap	2.85 ^{2.70}

Cat. No.	Finish	Page No.	Code	Price	Cat. No.	Finish	Page No.	Code	Price
J-518-C	Tensolite	28	Dola ^{1.59}	\$ 1.50	V-1992	Chromalum	21	Aiib	\$13.50
J-519	Crustal Bottom	28	Mystic ^{3.15}	3.00	V-2542-E	Browntone	34	Waft	.45
J-519-D	Crystal Bottom	28	Master ^{4.26}	4.05	V-2542-E	Ivory Pastelle	34	Nabob	.45
J-537	Satinchrome	24	Ecg	16.50	J-3508	Opal	27	Cejh	^{.78} .75
V-551	Satinchrome	24	Eea	5.25	J-3508-L	Opal, Black Line	27	Cejhl	1.05
V-554	Chromium	30	Eed	3.60	J-3510	Opal	27	Ceaj	^{1.41} 1.35
V-556	Chromium	30	Eef	4.50	J-3510-L	Opal, Black Line	27	Ceajl	1.80
V-556-M	Chromium	30	Eefm	5.10	J-3512	Opal	27	Ceab	^{2.22} 2.10
J-567	Satinchrome	24	Efg	12.45	J-3512-L	Opal, Black Line	27	Ceabl	3.00
J-575	Green Line	26	Pork ^{1.26}	1.20	J-3514	Opal	27	Cead	^{3.00} 2.85
J-576	Black Line	26	Truck ^{1.26}	1.20	J-3514-L	Opal, Black Line	27	Ceadl	4.35
J-595	Chromium	26	Eje	4.50	J-3516	Opal	27	Ceaf	^{3.93} 3.75
J-596	Chromium	26	Ejf	8.55	J-3516-L	Opal, Black Line	27	Ceafll	5.80
J-597	Chromium	26	Ejg	10.50	J-3806	Glass	26	Chjf	^{1.11} 1.05
J-709	Opal	29	Gji	1.20	J-3807	Glass	26	Chig	^{1.11} 1.05
J-709-B	Opal, Black Line	29	Gjib	1.80	J-3808	Glass	26	Chjh	^{1.59} 1.50
J-714	Opal	29	Gad	4.80	J-3813	Glass	26	Chac	^{4.71} 4.50
J-714-B	Opal, Black Line	29	Gadb	6.75					
V-901-21	Brush Brass	36	Pansy	.60					
V-901-21	Browntone	36	Peril	.75					
V-901-21	White Enamel	36	Pedal	.81					
V-901-21	Statuary Bronze	36	Ache	.81					
V-1921	Chromalum	21	Aqua	5.85					
V-1982	Chromalum	21	Aiib	12.75					
V-1982-C	Chromalum	21	Aihbc	13.50					
V-1985	Chromalum	21	Aihe	16.80					
V-1985-C	Chromalum	21	Aihec	17.55					

OFFSET STRAPS

4 inch, with screws	36	6.00 C
5 inch, with screws	36	6.75 C
6 inch, with screws	36	7.50 C
5 inch, with thumb knobs and screws	36	9.75 C
6 inch, with thumb knobs and screws	36	10.50 C

ADDENDA

When commercial pendants are required in lengths over the standard length, following schedules apply:

Statuary Bronze Chain, including wire \$.21 per foot	Statuary Bronze Casing Sections, 7½" long with Connecting Collar \$.48
Chromium Chain, including wire30 per foot	Chromium Casing Sections, 7½" long with Connecting Collar63
Statuary Bronze Casing, including wire54 per foot	Chromalum Casing Sections, 7½" long with Connecting Collar54
Chromium Casing, including wire60 per foot	For Levolver Switch, add \$1.35 List

If commercial pendants or ceiling holders are desired with special switch and socket for use with the Mazda 3-light lamp, add \$2.55 to the medium socket list.

Nos. V-45 and V-46 may be supplied with slip canopy and stem at an additional cost of \$.12 each list.

¾ Female Stems—Statuary Bronze \$.27 List	¾ Female Stems—Chromium \$.36 List
Brushed Brass27 List	½ Male Loops— Statuary Bronze06 Each
Ivory27 List	¾ Male Loops— Statuary Bronze18 Each

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